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December 8, 2017

Kodi Jean Verhalen
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Patricia Gillispie Miller
Office of Regional Counsel
US EPA, Region 7
11201 Renner Blvd
Lenexa, KS 66219

Re: CHS Inc. Response to Request for Information Pursuant to Section 308 of the Clean Water Act

Dear Ms. Miller:

Enclosed please find the written responses of CHS Inc. related to its facility located in South Sioux City, Nebraska. As mentioned in our phone conversation and in the responses and supporting documentation that is attached, CHS Inc. is willing to meet with EPA to discuss the operations of the facility over the period of time identified in the EPA's request.

Please do not hesitate to contact me if you have any questions or to set up a time to meet with myself and CHS Inc. personnel.

Sincerely,

Briggs and Morgan, P.A.

/s/ Kodi Jean Verhalen

Kodi Jean Verhalen

KJV
Attachments

CONFIDENTIAL BUSINESS INFORMATION HAS BEEN EXCISED

CHS Response to EPA Information Request 11/17/17

1. Identify the person to contact regarding your response, including title, address, email address and phone number.

CHS contact: Eric Colvin
Environmental Health and Safety Manager
Address: CHS
MS 304
5500 Cenex Drive
Inver Grove Height, MN
55033
Email: eric.colvin@chsinc.com
Phone: (651) 355-6607

2. Your responses to the questions are to be provided by a qualified professional. Provide the name and credentials of the person(s) providing information in response to this Information Request.

Eric Colvin, EHS Manager

The information contained in this response and in the attachments contains important and valuable trade secret and confidential information that relates to the operations of the CHS, Inc. facility in South Sioux City, Nebraska. Therefore, CHS, Inc. asserts a claim of confidentiality for this information under 33 U.S.C. § 1318 and 18 U.S.C. § 1905.

With regard to the wastewater discharges from the CHS, Inc., facility in South Sioux City, Nebraska:

3. Provide hourly summaries of all pH measurements and corresponding wastewater flows taken for each day of the month from January 1 through October 31, 2016. For the periods of September 1 through September 30, 2016 and October 1 through October 31, 2016, provide the pH reading and corresponding wastewater flowrates taken for each minute of each day for those periods. If available, provide the data for September and October 2016 in Microsoft Excel workbooks, with each worksheet in the workbook containing one day's worth of measurements.

The EPA has requested information "with regard to the wastewater discharges from the CHS Inc., facility in South Sioux City, Nebraska." Specifically, the EPA has requested hourly summaries of all pH measurements and corresponding wastewater flows for the period of January 1 through October 31, 2016 and minute summaries for the period of September 1 through October 31, 2016. The CHS Inc. facility in South Sioux City, Nebraska did not have a pH monitor measuring the effluent (wastewater discharge) leaving the facility during the time frame for which the information is requested. The plant was not required to have such a monitor by the City of Sioux City wastewater permit. Such monitoring was also not required by the receiver of the effluent from the CHS facility during portions of the identified period (Big Ox Energy (BOE)).

During the identified period of time, CHS monitored pH of its wastewater by use of [redacted] CHS is happy to discuss further with the EPA whether this information is necessary for EPA's objectives in this effort given the pH information maintained by the CHS facility is not wastewater discharge information.

Additionally, the requested information related to the wastewater flows for the same time frames was not required to be monitored by the City of Sioux City wastewater permit. These data prior to October 1, 2016 are not reliably available. Therefore, we have provided monthly totals of wastewater flow for January 1 through September 30, 2016 **(Jan-Sept 2016 Wastewater Flow per Billing.xlsx)**. CHS has, however, been able to compile hourly wastewater flow information for the period of October 1 through October 31, 2016 **(Oct 2016 Data Summary.xlsx)**. To provide this information in a per-minute format as requested by the EPA would require substantial time and effort to prepare and we are happy to discuss further with the EPA whether this substantial effort is necessary for EPA's objectives in this request.

From January 1, 2016 to October 31, 2016 the City of Sioux City performed at least monthly pH sampling in conformance with CHS's wastewater permit. CHS was never informed of any samples outside of the wastewater permit limits. It is CHS's understanding these samples followed 40 CFR 136 requirements. A copy of these results supplied to CHS by the City of Sioux City is included with this response **(CHS pH log 2016.PDF)**. Please note that the information provided in the attachment, CHS pH Log 2016, is as it was received by CHS from the City of Sioux City, and note that some of the City of Sioux City entries date the collection date *after* the sample date. We believe these may be transcription errors by the City of Sioux City but have been unable to confirm that with them. As noted below, a pH probe was added to measure wastewater leaving the plant in March 2017 to gather additional information at the point of discharge.

4. For the period from January 1 through October 31, 2016, identify all reagents used for pH adjustment. Provide the strength or concentration of each reagent used.

For the period from January 1 through October 31, 2016, CHS used [redacted] that is then used for system processes, including pH adjustment.

5. For the period from January 1 through October 31, 2016, provide all records showing the amount of reagent used in the pH adjustment system. Please group reagent use data by month and provide copies of all invoices showing the purchase of each reagent used for pH adjustment.

For the period from January 1 through October 31, 2016, and continuing today, the [redacted] that are used for pH adjustment are also used for other process operations and CHS Inc. is not able to provide the amounts of reagent used only in the pH adjustment system.

6. Provide a description of the pH adjustment system, specifically including the following information:

a. The year the pH adjustment system was installed and the system's cost when installed. If any significant upgrades to the system have occurred since installation, identify the date(s) of such upgrades and the cost for each upgrade.

The pH adjustment system was installed [redacted] are discussed in item 6.j of this response.

b. The hours per day that the pH adjustment system operated, and describe any routine variations, for example, over weekends and holidays.

The system is always operational when there is wastewater in the equalization tank. The plant typically operates 24/7. [redacted] As noted above, the facility does not have records other than those presented when wastewater discharge occurred.

c. The number of full time equivalent employees required to operate the pH adjustment system.

During the period of January 1 through October 31, 2016, it took [redacted] monitor, test, and maintain the pH adjustment system.

d. The capacity in gallons per minute of the pump or pumps used to inject acid into the pH adjustment system.

The pump used for [redacted] capacity. However, it should be noted the [redacted] plant operations.

e. The capacity in gallons per minute of the pump or pumps used to inject caustic into the pH adjustment system.

The pump used for [redacted] capacity.

f. Describe how mixing of reagent and wastewater is accomplished. Provide the number of units and horsepower of each unit used to achieve efficient contact between reagent and wastewater, and the size of the tank used for mixing.

From January 1 through October 31, 2016, wastewater from the process entered a receiving pit [redacted] A drawing illustrating this system is included with this response **(CHS Wastewater Prior to 2 7 17.PDF)**.

g. The set points at which the pH adjustment system begins to meter acid reagent into the system and ceases to introduce acid reagent. If this was changed during any period from January 1 through October 31, 2016, please describe.

h. The set points at which the pH adjustment system begins to meter caustic reagent into the system and ceases to introduce caustic reagent. If this was changed during any period from January 1 through October 31, 2016, please describe.

From January 1 to October 31, 2016, [redacted] The following pH adjustment set points were in place:

January 1 to October 6, 2016: 5.5 and 9.7.
These set points had historically shown to meet the pH effluent requirements of the wastewater permit.

October 6 to November 2016; 6.0 and 9.7
CHS moved the low pH set point to assure the pH level of the wastewater leaving the facility was not contributing to the low pH issues developing in the BOE equalization tank as they attempted to start the new facility. The original contract between BOE and CHS did not contain any pH requirements.

November 2016 to April 1, 2017: 5.5 and 9.7

The set points were returned to the normal settings because BOE was not operational and wastewater was being sent to the City of Sioux City POTW.

April 1, 2017 to Present: The current settings are 7.0 and 10.35 to meet the requirements of the current City of South Sioux City permit.

i. Provide information regarding the maximum capacity of the pH adjustment system, including:

Regarding the maximum capacity of the pH adjustment system:

i. the maximum wastewater flow in gallons per minute that can be treated;

The pH adjustment system [redacted]

The facility currently has no issues meeting the current much narrower pH limits. The pH adjustment chemicals, the addition triggering devices and the capacity of the addition system has not changed. Therefore, one could infer, during the requested time frame that the system could [redacted] observed flow rate.

ii. the maximum rate, in gallons per minute, that acid can be injected; and

CHS did not record the maximum amount of flow of hydrochloric acid for pH adjustment. The [redacted].

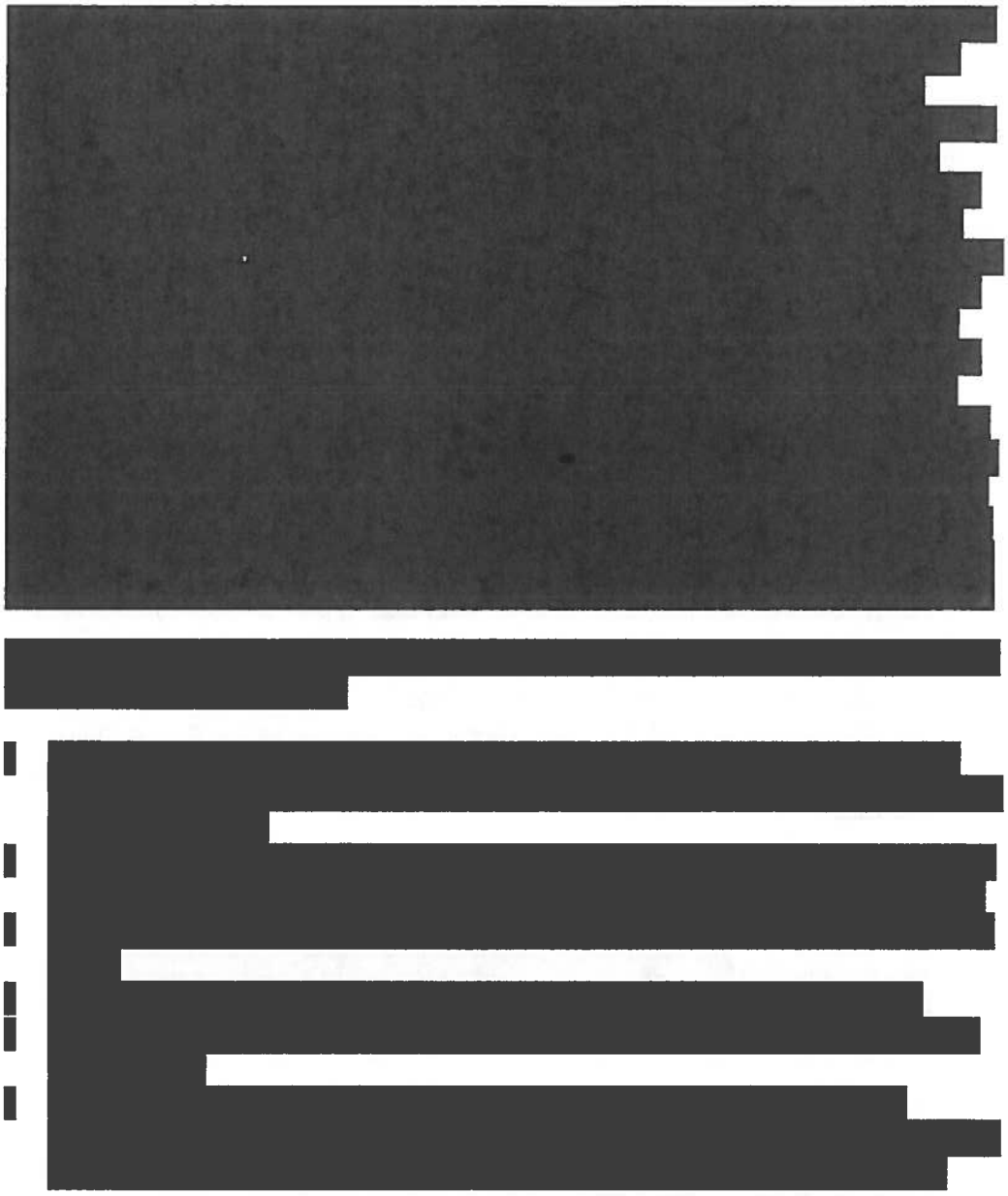
iii. the maximum rate, in gallons per minute, that caustic can be injected.

The flow meter on the [redacted]

j. Have any upgrades to the pH adjustment system been made since October 2016 or are any upgrades planned? If so, provide details discussing:

i. any changes in configuration;

[redacted] A drawing illustrating the current system is included with this response **(CHS Wastewater Current 5 30 17.PDF)**.



ii. any changes in treatment chemical use; and

There have been no changes in treatment chemical use.

iii. any changes in capacity.

There have been no changes in the capacity of the system.

Monthly Effluent Flows Per Sioux City Billing Statement	
January	9,267,000.00
February	12,344,000.00
March	11,451,000.00
April	12,555,000.00
May	10,548,000.00
June	14,075,000.00
July	13,288,000.00
August	6,810,000.00
September	17,488,000.00

Collection Date	Sample Date	Time	Result
12-Jan	12-Jan	10:39	13.5
15-Jan	13-Jan	11:12	13.36
15-Jan	14-Jan	11:12	6.25
26-Jan	26-Jan	11:55	7.68
16-Feb	15-Feb	11:44	7.89
16-Feb	16-Feb	11:44	7.42
8-Mar	8-Mar	10:55	10.55
15-Mar	15-Mar	1:00	9.44
19-Apr	19-Apr	10:35	7.05
22-Apr	20-Apr	11:57	7.11
17-May	17-May	11:10	7.71
7-Jun	7-Jun	11:15	7.39
16-Aug	16-Aug	12:33	6.97
6-Sep	6-Sep	10:17	8.42
15-Sep	15-Sep	10:58	9.4
	16-Sep		9.07
20-Sep	17-Sep	1:30	6.71
20-Sep	18-Sep	1:30	5.88
14-Oct	14-Oct	11:12	7.92
8-Nov	8-Nov	12:20	6.51
16-Dec	16-Dec	11:06	6.62

ENCLOSURE 2

STATEMENT OF CERTIFICATION
(To be submitted with every response to the Information Request)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

Signature

12·8·17
Date

THOMAS J MALECHA
Printed Name

Vice President
Title

40 C.F.R. § 122.22(a). Signatories to permit applications and reports.

(1) **For a corporation**. By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

Note: EPA does not require specific assignments or delegations of authority to responsible corporate officer identified in Sec. 122.22(a)(1)(i). The Agency will presume that these responsible corporate officers have the requisite authority to sign permit applications unless the corporation has notified the Director to the contrary. Corporate procedures governing authority to sign permit applications may provide for assignment or delegation to applicable corporate positions under Sec. 122.22(a)(1)(ii) rather than to specific individuals.

(2) **For a partnership or sole proprietorship**. By a general partner or the proprietor, respectively; or

(3) **For a municipality, State, Federal, or other public agency**. By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes: (i) The chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).